Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method for individualizing a hearing aid in adaptation to a loudness perception of an individual, said method comprising the steps of:

measuring and quantifying loudness perception parameters of the individual, weighted by a ~~positive~~ first factor that is non-zero and non-unitary;

weighting of normal loudness perception parameters by a ~~positive~~ second factor that is different from said first factor and is also non-zero and non-unitary;

combining the weighted loudness perception parameters of the individual with the weighted normal loudness perception parameters to define a weighted loudness parameter; and

using the weighted loudness parameter for adjusting the hearing aid.

2. (previously presented) The method as in claim 1, wherein compression and/or amplification is/are adjusted in the hearing aid, for which purpose the compression and, respectively, the amplification are each determined as a function of frequency.

3. (currently amended) A method for individualizing a hearing aid in adaptation to a loudness perception of an individual, said method comprising the steps of:

adjusting the hearing aid using both (1) measured and quantified loudness perception parameters of the individual weighted by a first factor and (2) normal

loudness perception parameters weighted by a second factor; and

adjusting compression and/or amplification in the hearing aid, for which purpose the compression and, respectively, the amplification are each determined as a function of frequency, wherein

for determining the compression, the loudness perception of the individual is quantified by means of a ~~HVLS/~~LOHL factor

which is determined by loudness scaling at a minimum of one frequency.

4. (currently amended) The method as in claim 3, wherein the ~~HVLS/~~LOHL factor is modeled using the equation:

$\log_{10}(\alpha) = a_a \times$ ~~HV/~~HL $+ b_a \times \log$ (~~HV/~~HL) $+ VP_{consta}$ where

α = a gradient of the loudness function,

~~HV/~~HL = a hearing loss in dB,

a_a, b_a = constant function parameters, and

VP_{consta} = an individual function parameter which adapts the ~~HVLS/~~LOHL factor to data sampling points α_1, α_2, α_3, ...,

and that VP_{consta} is determined on the basis of a loudness scaling performed at a minimum of one frequency.

5. (currently amended) ~~The method as in claim 2,~~ A method for individualizing a hearing aid in adaptation to a loudness perception of an individual, said method comprising the steps of:

measuring and quantifying loudness perception parameters of the individual, weighted by a first factor;

weighting of normal loudness perception parameters by a second factor;

combining the weighted loudness perception parameters of the individual with the weighted normal loudness perception parameters to define a weighted loudness parameter; and

using the weighted loudness parameter for adjusting the hearing aid, wherein

compression and/or amplification is/are adjusted in the hearing aid, for which purpose the compression and, respectively, the amplification are each determined as a function of frequency, and wherein,

for determining the amplification, the loudness perception of the individual is quantified by means of an ~~HVL0/~~HLL0 factor which is defined by loudness scaling at a minimum of one frequency.

6. (currently amended) The method as in claim 5, wherein the ~~HVL0/~~HLL0 factor is modeled using the equation:

$L_0 = a_L \times$ ~~HV/~~HL $+ b_L \times \log($~~HV/~~HL$) + VP_{constL}$, where

L_0 = a level of loudness = 0,

~~HV/~~HL = a hearing loss in dB,

a_L, b_L = a constant function parameters, and

VP_{constL} = an individual function parameter which adapts the ~~HL0/~~HLL0 function to the data sampling points L_{01}, L_{02}, L_{03}, ...,

and that VP_{constL} is determined on the basis of a loudness scaling performed at a minimum of one frequency.

7. (previously presented) The method as in one of the claims 4 to 6 and 11, wherein the hearing loss is used for determining the frequencies at which loudness scaling is performed.

8. (previously presented) The method as in one of the claims 3 to 6 and 10 to 11, wherein the value of the weighted factors depends on the assumed and/or determined accuracy of the loudness scaling data.

9. (previously presented) The method as in claim 8, further comprising the selection of a value of 1/3 for the first factor and/or a value of 2/3 for the second factor.

10. (currently amended) ~~The method as in claim 2~~, A method for individualizing a hearing aid in adaptation to a loudness perception of an individual, said method comprising the steps of:

measuring and quantifying loudness perception parameters of the individual, weighted by a first factor;

weighting of normal loudness perception parameters by a second factor;

combining the weighted loudness perception parameters of the individual with the weighted normal loudness perception parameters to define a weighted loudness parameter; and

using the weighted loudness parameter for adjusting the hearing aid, wherein

compression and/or amplification is/are adjusted in the hearing aid, for which purpose the compression and, respectively, the amplification are each determined as a function of frequency, and wherein,

for determining the compression, the loudness perception of the individual is quantified by means of a ~~HVLS~~/LOHL factor which is determined by loudness scaling at a minimum of one frequency.

11. (currently amended) The method as in claim 10, wherein

the ~~HVLS/~~LOHL factor is modeled using the equation:

$\log_{10}(\alpha) = a_a \times$ ~~HV/~~HL $+ b_a \times \log$ (~~HV/~~HL) $+ VP_{consta}$ where

α = a gradient of the loudness function,

~~HV/~~HL = a hearing loss in dB,

a_a, b_a = constant function parameters, and

VP_{consta} = an individual function parameter which adapts the ~~HVLS/~~LOHL factor to data sampling points α_1, α_2, α_3, ...,

and that VP_{consta} is determined on the basis of a loudness scaling performed at a minimum of one frequency.

12. (previously presented) The method as in claim 1, further comprising the selection of a value of 2/3 for the first factor and/or a value of 1/3 for the second factor.

13. (currently amended) A method for individualizing a hearing aid in adaptation to a loudness perception of an individual, said method comprising the steps of:

measuring and quantifying loudness perception parameters of the individual, weighted by a first factor;

weighting of normal loudness perception parameters by a second factor;

combining the weighted loudness perception parameters of the individual with the weighted normal loudness perception parameters to define a weighted loudness parameter; and

using the weighted loudness parameter for adjusting the hearing aid, wherein

compression and/or amplification is/are adjusted in the hearing aid, for which purpose the compression and,

respectively, the amplification are each determined as a function of frequency, and wherein

for determining the amplification, the loudness perception of the individual is quantified by means of one of an ~~HVL0/~~HLL0 factor and an ~~HVLS/~~LOHL factor, which is defined by loudness scaling at a minimum of one frequency.